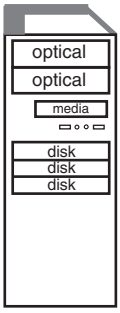
ThinkStation® S20 (4157) - Windows 7 (February 2011)

Type-model	Slot x bay	Processor(s)	GHz	Core	Memory DIMMs	Disk(s)	Pre-conf RAID	SATA optical	1394 adptr	Media reader	Chassis intrusion switch	Graphics adapter(s)	Global	Win7 preload	Ann date (mm/dd/yy)
4157-N1U	5x6	E5603	1.6	4	2x2GB	1x500GB SATA	No	DVD±RW		Media	Switch	1x2000	No	Pro 64	02/15/11
4157-N2U	5x6	E5607	2.26	4	2x2GB	1x500GB SATA	No	DVD±RW		Media	Switch	1x600	No	Pro 64	02/15/11
4157-N3U	5x6	W3690	3.46	6	2x2GB	1x500GB SATA	No	DVD±RW	1394	Media	Switch	1x4000	No	Pro 64	02/15/11
4157-N4U	5x6	W3550	3.06	4	2x2GB	1x300GB SAS	No	DVD±RW		Media	Switch		No	Pro 64	02/15/11
4157-N5U	5x6	W3550	3.06	4	2x2GB	1x300GB SAS	No	DVD±RW		Media	Switch	1x2000	No	Pro 64	02/15/11
4157-N6U	5x6	W3690	3.46	6	3x2GB	1x300GB SAS	No	DVD±RW	1394	Media	Switch	1x4000	No	Pro 64	02/15/11

- *These systems are Microsoft Office 2010 Product Key Ready (O10PKR)*

Processor	**Intel® Xeon® Processor W3550** with **quad-core**, 4.8GT/s (giga-transfers/second) QPI (QuickPath Interconnect), Intel 64, Virtualization Technology, 1066MHz DDR3 memory controller, and 8MB cache **Intel Xeon Processor W3690** with **six-core**, 6.4GT/s (giga-transfers/second) QPI (QuickPath Interconnect), Intel 64, Virtualization Technology, 1333MHz DDR3 memory controller, and 12MB cache **Intel Xeon Processor E5603** with **quad-core**, 4.8GT/s (giga-transfers/second) QPI (QuickPath Interconnect), Intel 64, Virtualization Technology, 1066MHz DDR3 memory controller, and 4MB cache **Intel Xeon Processor E5607** with **quad-core**, 4.8GT/s (giga-transfers/second) QPI (QuickPath Interconnect), Intel 64, Virtualization Technology, 1066MHz DDR3 memory controller, and 8MB cache
Implementation	One LGA1366 socket
Memory	48GB max, **UDIMM**, **PC3-10600 1333MHz DDR3**, **ECC**, 3-channel capable, six 240-pin DIMM sockets
Additional memory disclaimers	• Actual memory operating speed is the lowest installed speed, dependent on processor memory controller speed and installed memory speed
Graphics	*Some:* **NVIDIA® Quadro® 600**, PCIe x16 adapter, 1GB, one DisplayPort™, one dual-link DVI-I, 40W *Some:* **NVIDIA Quadro 2000**, PCIe x16 adapter, 1GB, two DisplayPort, one dual-link DVI-I, 62W *Some:* **NVIDIA Quadro 4000**, PCIe x16 adapter, 2GB, two DisplayPort, one dual-link DVI-I, one stereo, 142W
Media reader	Media card reader, internal USB 2.0
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive
Hard drive(s)	*Some:* 500GB, SATA 3.0Gb/s, 7200 rpm, 3.5" *Some:* 300GB, SAS 3.0Gb/s, 15000 rpm, 3.5"
SATA controller	Serial ATA, SATA 3.0Gb/s, integrated in ICH10R, three SATA connectors for disks, two SATA connectors for opticals
SAS controller	*Some:* Marvell® 88SE6440, PCIe x4 adapter, 4 SATA/SAS[4] connectors, SATA 3.0Gb/s, SAS 3.0Gb/s (SAS model(s) only)
Chipset	**Intel X58 Express Chipset**, Intel I/O Controller Hub 10 RAID (ICH10R) for RAID 0, 1, 5 support, Winbond® W83627DHG-P Super I/O
Front ports	Two USB 2.0, microphone (3.5mm), headphone (3.5mm)
Rear ports	Eight USB 2.0, eSATA, serial (9-pin), ethernet (RJ-45), six analog audio ports (line-in, mic-in, front-out, rear-out, center/sub-out, side-out), Optical SPDIF digital out, Optical SPDIF digital in
IEEE 1394 adptr	*Some:* FireWire PCI adapter, 1394a-2000, 400Mbps, two 6-pin ports on rear
Audio	High Definition (HD) Audio, Analog Devices AD1988A codec
Speaker	Internal speaker for business audio
Ethernet	One gigabit ethernet on planar, Broadcom® BCM5755
Security chip	Broadcom Trusted Platform Module, TCG 1.2-compliant
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black
Mouse	Optical Wheel Mouse (USB connector), black
Power supply	625 watts with 120mm bottom-mounted variable speed fan, universal, **Climate Savers® Computing Bronze**, **80 PLUS® Bronze** qualified
ThinkVantage®	Supports ThinkVantage technologies
Limited Warranty	3-year parts and labor, Customer Replaceable Unit (CRU) parts only (More ThinkPlus® services are available on S-TS sheet)
Preload OS	Genuine Windows® 7 Professional 64
Preloaded applications	• Rescue and Recovery® • ThinkVantage System Update • ThinkVantage Toolbox • Norton® Internet Security (30 days of virus definitions) • Microsoft® Office 2010 preloaded; purchase product key to activate • Roxio® Creator® Business Edition (DVD±RW model(s) only) • Roxio MyDVD® (DVD±RW model(s) only) • Corel® WinDVD® (DVD or DVD±RW model(s) only) • Ulead® DVD MovieFactory® (Blu-ray model(s) only)

Tower



- Raven black color; metal case
- 6.9"W x 19.0"D x 18.8"H (with handle)
- 175mm W x 483mm D x 478mm H
- 38.5 lb (17.5kg) max configuration
- 31-liter
- Removable handle on top front
- Toolless side cover removal
- Toolless disk and optical drive removal
- Toolless adapter retention
- Illuminated front icons
- Rack shelf support

Bay 1: 5.25", 1.6" high, external, std optical
Bay 2: 5.25", 1.6" high, external, open
Bay 3: 3.5", 1" high, external, std media reader
Bay 4: 3.5", 1" high, internal, std disk
Bay 5: 3.5", 1" high, internal, opt disk
Bay 6: 3.5", 1" high, internal, opt disk

Slot 1: full-length, full-height, PCIe 2.0 x16 (75W* max)
Slot 2: full-length, full-height, PCIe 2.0 x4**
Slot 3: full-length, full-height, PCIe 2.0 x16 (75W* max)
Slot 4: full-length, full-height, PCIe x1
Slot 5: half-length, full-height, 32-bit PCI 2.3

* Adapters >75W use auxiliary power connector(s) from PSU
** x16 mechanical

SECURITY

- Security chip (see information on left)
- Side cover lock (ships with two identical keys)
- Padlock loop (in rear for opt padlock)
- Security slot (in rear for optional Kensington® Microsaver® cable)
- Power-on password
- Administrator password
- Boot sequence control
- Boot without keyboard, mouse
- USB port disablement (front or all)
- *Chassis intrusion switch on selected model(s)*

GREENGUARD® certified
RoHS-compliant
EPEAT™ Gold rating

More compatible accessories, please see O-SEV sheet

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